



Anchor Environmental, L.L.C.
1423 3rd Avenue, Suite 300
Seattle, Washington 98101
Phone 206.287.9130
Fax 206.287.9131

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Memorandum

To: Ash Grove Cement Company
From: Sasha Visconty, Anchor Environmental, L.L.C.
CC: David Pierce, P|N|D Incorporated, Consulting Engineers
Date: January 6, 2005
Re: No Effects Letter for Ash Grove Cement Barge Loading Facility Fender System Replacement

Ash Grove Cement plans to replace an above-water fender system at an existing barge loading facility in the Lower Duwamish Waterway (Figure 1). Figures 2 through 4 show the proposed project. Photo 1 shows the existing rub face being used by a barge.

The existing rubber-tire bumpers on the waterward dock face are worn to the point where they no longer provide adequate protection when barges land at the dock. Ash Grove Cement wishes to replace the existing tires with a durable fendering system designed for dock protection. This is necessary for the continued use of the facility. The fendering system is in urgent need of repair and will be replaced as quickly as possible.

The planned repair work will have no effect to listed threatened and endangered species or proposed critical habitat pursuant to the Endangered Species Act (ESA).

ACTIVITY DESCRIPTION

The dock at the barge berthing facility is protected by eight used rubber tires attached to the waterward face as shown in Figure 2. Ash Grove Cement proposes to replace these tires with a durable high-density polyethylene (HDPE) fendering system. The system occurs at water depths approximately -21 ft mean lower low water (MLLW).

The existing rubber tires are chained to piles along the dock face. They will be removed by workers on a barge or on the existing dock and the tires will be disposed of at an appropriate upland facility.

The HDPE fendering system consists of a fender panel as shown in Figures 3 and 4, running from the edge of the dock (elevation + 16 ft MLLW) to -1 ft MLLW. A cylindrical strip of energy-absorbing rubber (called an "energy donut") above the fender panel will dampen impacts to the dock from loaded barges landing at the berth, while the HDPE material deflects energy by allowing barges to slide against the dock face.

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The components of the fender system will be lifted into place and bolted to the dock by workers and equipment staged on a barge or on the existing dock. The vertical fenders will be braced by angled steel struts running from the bottom of the fender panel to the top of the deck support piles (Figure 4). A small skiff or work platform may be used to access the struts located beneath the dock.

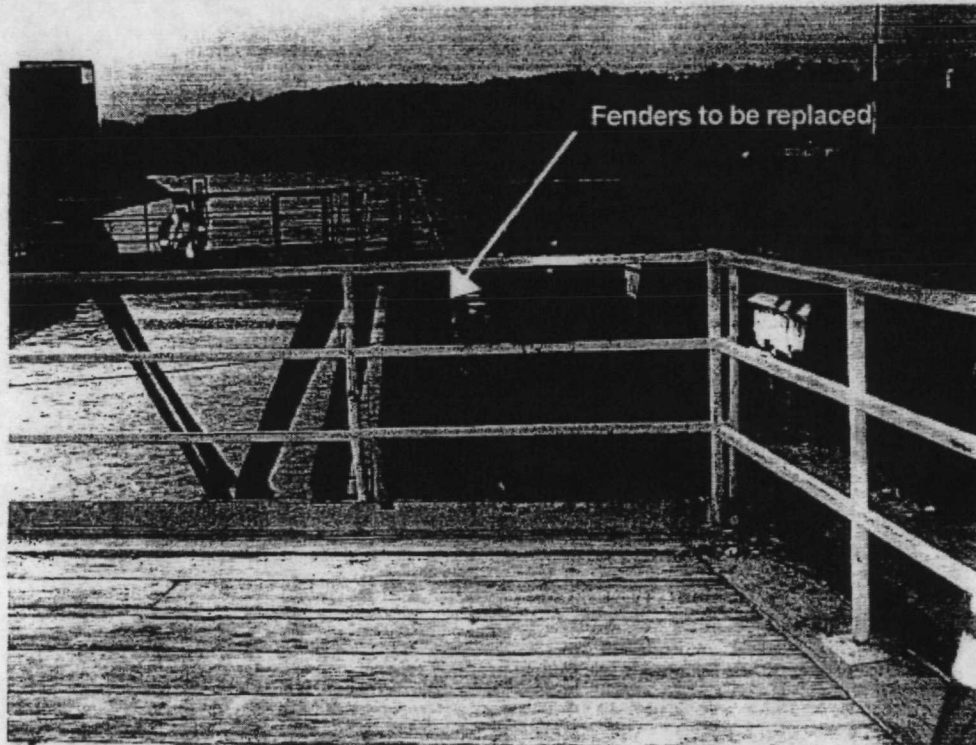


Photo 1. Existing fender system. Note the existing rubber tires are barely visible in front of the existing rub face.

PROJECT TIMING

This project will take approximately 3 to 5 days to complete DAVID, IS THIS TRUE?? and is planned to begin as soon as permits are received. Because this project will have no effect on listed species in the project area and the effects determination is not based on the absence of species in the action area, this work could occur any time of year.

Conservation Measures

- Any debris that falls into the water during the fender replacement process will be retrieved and disposed of upland.
- No new potential leaching sources will be introduced to the aquatic environment. A potential source of PAHs (the existing tires) will be removed.

SPECIES OCCURRENCE AND EFFECTS DETERMINATIONS

The Lower Duwamish Waterway is an industrial area that supports estuarine wildlife. Species that may occur on or near the site include Puget Sound chinook salmon and proposed critical habitat, bull trout and proposed critical habitat, and bald eagles.

Puget Sound Chinook (*Oncorhynchus tshawytscha*)

Status: Puget Sound chinook is listed as threatened in Puget Sound. The Duwamish Waterway is used by Puget Sound chinook salmon migrating between Puget Sound and the Duwamish River.

Proposed Critical Habitat: On December 14, 2004, National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) published proposed rules for designating critical habitat for 13 Evolutionarily Significant Units (ESUs) of Pacific Salmon and Steelhead in Washington, Oregon, and Idaho. This designation includes the Puget Sound ESU of chinook salmon which is currently listed as threatened under the Endangered Species Act (ESA). Critical habitat is designated for areas containing the physical and biological habitat features, or primary constituent elements (PCEs) essential for the conservation of the species or which require special management considerations. The Lower Duwamish Waterway provides a migration corridor for salmonids and is part of the estuarine transition zone between salt and fresh water. The waterway is free of obstructions, but lacks natural elements of cover such as aquatic vegetation, large woody debris, side channels, and undercut banks.

Species Occurrence: Chinook of all life history stages use the Green/Duwamish River system. Mature salmon migrate through the area to reach upstream spawning grounds, but spawning is unlikely to occur in the project area because it is undesirable spawning habitat. The Green/Duwamish River system is also a migration route for juvenile chinook salmon. When present, these juveniles may use the project area for feeding and holding before entering further into the estuary and/or saltwater (Anchor 2004).

Effects Determination: The proposed activity will occur mostly above water. Mooring of barges at the site is a normal everyday occurrence. No pile removal or installation is associated with this work, and bottom sediments will not be disturbed. Based on the type of work proposed, the short duration and minimal disturbance from these repair activities, and the lack of additional disturbance from activities on fish and habitat, it is concluded that this project will have no effect on Puget Sound chinook.

This project is of very short duration, and disturbance associated with installation will be very similar to that of the barge off-loading activity that is normally performed at the site and baseline conditions will not change as a result of the project. Bottom sediments will not be disturbed. No sources of potential leaching will be introduced to the site, but a potential source of polyaromatic hydrocarbons (PAHs) will be removed when the existing worn rubber tires are removed. No critical habitat will be affected as a result of this project. Therefore, this project will not adversely modify proposed Puget Sound chinook critical habitat.

Bull Trout (*Salvelinus confluentus*):

Status: Bull trout are listed as threatened.

Critical Habitat: On June 25, 2004, USFWS published proposed rules for designating critical habitat for the Coastal-Puget Sound population of bull trout, which was listed as a threatened species in 1999. Critical habitat designates areas that contain PCEs essential for the conservation of a threatened or endangered species.

The project area contains some of the PCEs of proposed critical habitat for bull trout. The Lower Duwamish Waterway is heavily industrialized and there is a lack of a known spawning population in the Green/Duwamish River watershed. However, the river provides foraging habitat, prey resources, and a migratory corridor for bull trout. Goetz et al. (2004) compiled recent studies that have documented the occurrence of subadult and adult bull trout in the LDW, including some visual indications of successful feeding.

Species Occurrence: The Washington Department of Fish and Wildlife (WDFW) does not monitor bull trout in the Green/Duwamish system because, according to its records, bull trout do not spawn in this system. Rearing by juvenile bull trout may occur in the action area; however, no juvenile bull trout have been identified in sampling studies conducted in the vicinity of the action area (Salo 1969; Weitkamp and Campbell 1980; Meyer et al. 1981; Weitkamp and Schadt 1982; Parametrix 1990; Warner and Fritz 1995; Cordell et al. 1997; Cordell et al. 1998; Pacific International Engineering and Pentec Environmental 1999; Taylor et al. 1999; R2 Resource Consultants 2000). Some adult char have been captured in the upper turning basin during recent juvenile salmonid sampling studies conducted by the Port of Seattle (Hotchkiss 2000); analyses are underway to determine if these fish were bull trout or Dolly Varden. Additionally, a 1995 survey of fish populations in the lower Duwamish River conducted for the Muckleshoot Tribe identified a single adult bull trout in the reach between Highway 99 and Kellogg Island (Warner and Fritz 1995).

Effects Determination: The proposed activity occurs mostly above water. Mooring of barges at the site is a normal everyday occurrence and baseline conditions will not change as a result of the project. No pile removal or installation is associated with this work, and bottom sediments will not be disturbed. Based on the type of work proposed, the short duration and minimal disturbance from these repair activities, and the lack of additional disturbance from activities on fish and habitat, it is concluded that this project will have **no effect on bull trout**.

This project is of very short duration, and disturbance associated with installation will be very similar to that of the barge off-loading activity that is normally performed at the site. Bottom sediments will not be disturbed. No sources of potential leaching will be introduced to the site, but a potential source of polycyclic aromatic hydrocarbons (PAHs) will be removed when the existing worn rubber tires are removed. No critical habitat will be affected as a result of this project. Therefore, this project will

not adversely modify proposed Puget Sound chinook critical habitat. Therefore, it is concluded that this project will not adversely affect proposed bull trout critical habitat.

Bald Eagles (*Haliaeetus leucocephalus*):

Status: The bald eagle is listed as threatened.

Designated Critical Habitat: No critical habitat has been designated for bald eagles.

Species Occurrence: In Washington, resident bald eagle populations occur primarily near large bodies of water west of the Cascade Mountains. Bald eagles occur in the Puget Sound area, including Elliott Bay. The closest nest to the Ash Grove Cement facility is just over 0.5 miles away, on the opposite side of the Duwamish Waterway and across West Marginal Way. The nest was documented for the first time in 2002 (WDFW 2005). There may be a direct line of sight to the project area, however, other industrial sites, including an active railroad line, lie between the nest and the project area.

Effects Determination: Potential impacts to bald eagles from construction activities are from direct disturbance from construction equipment noise. The fender replacement project will take place at a site where gravel is routinely unloaded from barges and carried away by conveyor. The project will not result in noise that exceeds ambient levels in the heavily industrialized project area. Due to the type of work proposed, the short duration of construction activities, the minor magnitude of the work, and the fact that the Lower Duwamish Waterway industrial area experiences high levels of disturbance and noise levels during normal operations, it is determined that this project will have no effect on bald eagles.

PROJECT IMPACTS

Direct and Indirect Effects

This maintenance project generally occurs above water and will not directly or indirectly affect water quality, substrate, the shoreline, depth of water, access to habitat, flows or current patterns, salmonid prey or benthic communities, forage fish spawning substrates, aquatic vegetation, macrofauna, designated critical habitat, or species use of the barge berthing facility.

Any debris that may fall into the water will be retrieved by workers and disposed of at an appropriate upland location.

Noise levels will not exceed ambient levels, and noise is expected to be similar to existing ambient noise levels from vessel traffic, road and railway traffic, industry, and other human activities.

Therefore, no direct or indirect effects are identified as a result of this project.

Interrelated and Interdependent Actions

There are no identified interrelated or interdependent actions associated with the proposed project.

Cumulative Effects

Ash Grove Cement is not aware of any private, local, or state project being considered in proximity to its facility that would not require a federal permit and separate ESA consultation. This activity does not alter or result in a loss of aquatic habitat and does not contribute to a cumulative impact of loss of habitat or access to habitat.

CONCLUSIONS

Ash Grove Cement has determined that the maintenance and repair activity described in this document will have no effect on Puget Sound chinook salmon, bull trout, or bald eagles, and will **not result in adverse modification** of proposed critical habitat for Puget Sound chinook salmon or bull trout.

Project components that support this no effects determination include:

- Work will occur above water;
- Short construction window, **approximately 3 to 5 days**;
- No sediments will be disturbed;
- There will be no impacts to water quality;
- Noise generated by this project will remain within the existing ambient noise levels; and
- There will be no physical alteration or impact to habitat or substrate, and no physical change to the footprint of any structure.

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